

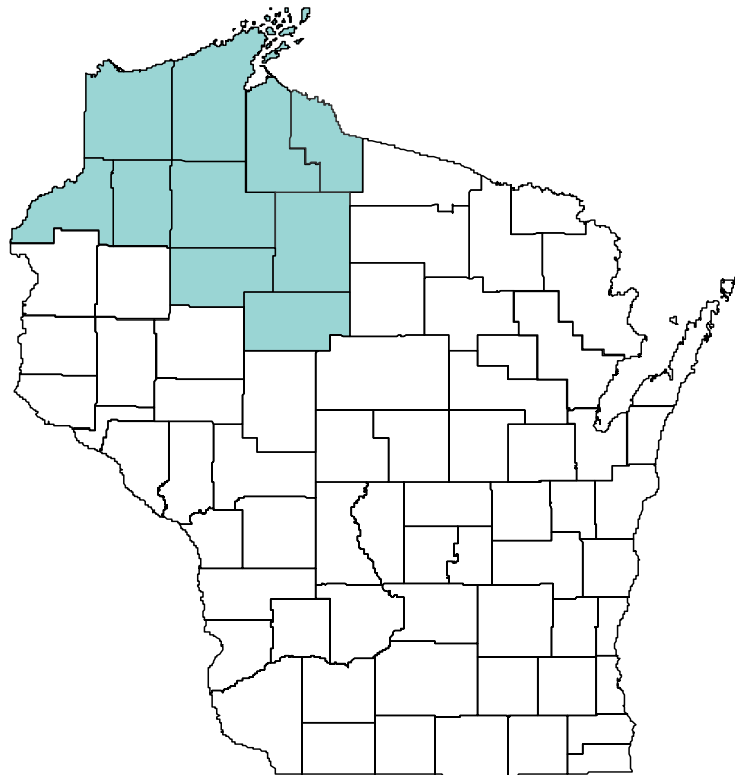
# Workforce Development Area Profile

## Northwest Wisconsin

Ashland, Bayfield, Burnett, Douglas, Iron, Price, Rusk,  
Sawyer, Taylor and Washburn Counties.

The labor market is a constant ebb and flow of supply and demand. Too little demand for workers creates too much supply and unemployment increases. But too little supply of workers means job vacancies and lack of employment growth.

Every Workforce Development Area in the state should anticipate a tight labor supply condition by the end of the next decade. Planners in each area must understand the unique set of employment characteristics in their region to development a strategy to meet a future where demand will exceed supply.



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State of Wisconsin  
Department of Workforce Development  
Office of Economic Advisors  
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## Industry employment and projections

The Northwest Wisconsin Workforce Development Area (WDA) is one of eleven WDAs in the State of Wisconsin; and like other WDAs, has a workforce that reflects the jobs with area employers. Those jobs are classified by the goods and services produced (industry) and by the occupations of the workers in those jobs. This profile examines the workforce in Northwest Wisconsin and, in some instances, draws comparisons to the other WDAs in the state (Note: the comparison charts in this publication combine the Milwaukee and WOW WDAs).

In the Northwest Workforce Development Area there were 69,710 jobs with 5,730 local employers in 2002. There are more jobs in education and health care services than any other industry group but there are more employers in the trade industry group. Over a ten-year period ending in 2012 the number of jobs in Northwest Wisconsin is projected to increase 11.8 percent to 77,960. Most of the 8,250 new jobs (88%) will be with service-providing employers.

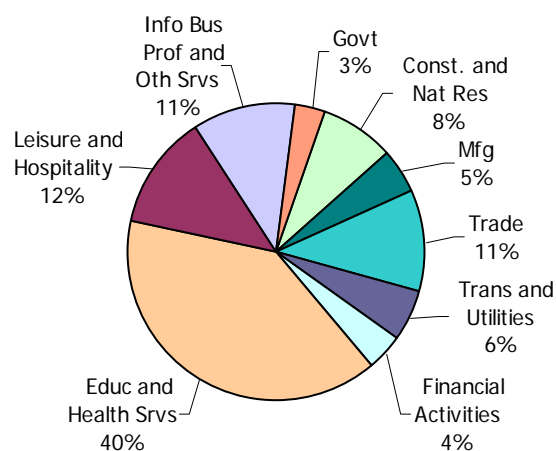
By 2012 there will be 60,300 jobs with employers in the service-providing sectors of trade; transportation and utilities; financial activities; education (both private and public) and health services; leisure and hospitality services; a group that includes information, professional and business services, and other services; and government. Employers in the service-providing industries have been increasing their dominance in the local economy for many years and that trend will continue during the projection period.

The largest industry group among the services-providing sector is education and health services. Education here

includes both private and public institutions. Employment with public institutions is included in order to focus on the occupations of jobs within the industry.

Education and health services employers will add nearly 3,300 jobs to the regional economy from 2002 to 2012. Roughly one-quarter of those new jobs will be with employers that provide ambulatory health services that include clinics, medical offices and emergency services. The number of jobs with ambulatory health providers is projected to increase 43 percent from 1,950 in 2002 to 2,790 in 2012. In addition to these jobs there are the projected new jobs

**Distribution of Job Growth by Industry Sectors in Northwest Wisconsin: 2002 - 2012**



**Industry Projections for Northwest Workforce Development Area, 2002-2012**

Industry Title	Employment		Ten-year change	
	2002 Estimate	2012 Projected	Numeric	Percent
Total Non-farm Employment	69,710	77,960	8,250	11.8%
Construction/Mining/Natural Resources	3,780	4,440	660	17.5%
Manufacturing	12,830	13,220	390	3.0%
Food Manufacturing	1,610	1,670	60	3.7%
Plastics and Rubber Products Manufacturing	1,020	1,250	230	22.5%
Machinery Manufacturing	1,500	1,450	-50	-3.3%
Trade	10,620	11,550	930	8.8%
Food and Beverage Stores	2,250	2,410	160	7.1%
Transportation and Utilities (Including US Postal)	3,980	4,440	460	11.6%
Financial Activities	2,320	2,630	310	13.4%
Education and Health Services (Incl'd state & local govt. ed. & hosp.)	13,480	16,760	3,280	24.3%
Educational Services (Including State and Local Government)	6,010	6,910	900	15.0%
Ambulatory Health Care Services	1,950	2,790	840	43.1%
Leisure and Hospitality	7,890	8,910	1,020	12.9%
Information/Prof Services/Other Services	6,740	7,680	940	13.9%
Government (Excluding USPS, state & local govt. ed. and hosp.)	8,070	8,350	280	3.5%

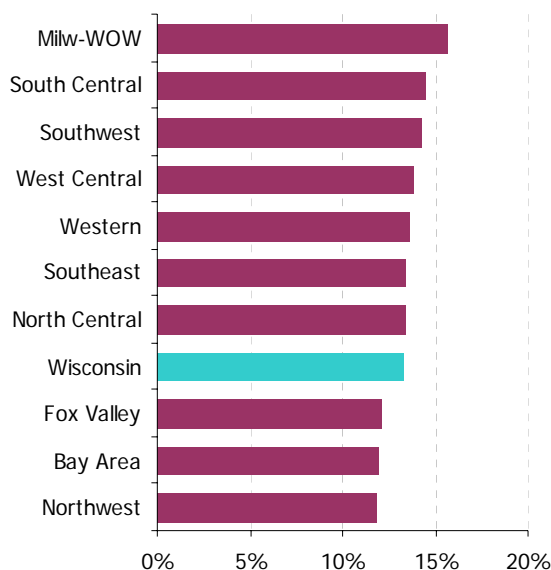
Source: WI DWD, Office of Economic Advisors, September 2004

with hospitals and resident health care providers that will add over 1,000 new jobs. The number of jobs in health care services is projected to increase in every region of the state as better technology that leads to improved healthcare generates an increasing need for services, especially among a population that is growing older. Educational services employment is also projected to increase 15 percent during the ten-year period.

Manufacturing employment, currently the second largest industry sector, is projected to increase by only 390 jobs over the ten-year period. There are 21 manufacturing industries in the sector in the northwest region but only nine are projected to add jobs from 2002 to 2012. Included among the nine with projected job growth are three of the four largest manufacturing industries in the region: wood products, food products, and plastics and rubber manufacturing. Employment data in the largest, wood manufacturing was suppressed in 2002 according to guidelines established by the U.S. Bureau of Labor Statistics because one employer comprised over 80 percent of employment in the industry in one regional county (there is no suppression of 2004 data on page 4). Machinery manufacturing, the third largest industry in the region and included in the table on page 1, is projected to lose jobs. Employment in machinery manufacturing has been declining since 1998 and, even though it is projected to continue losing jobs, should still be the third largest in 2012.

Included with manufacturing in the goods-producing sector is the industry group of construction, mining and natural resources. The second largest percent change in regional jobs, 17.5%, is projected for this group. The Northwest

Changes in Employment for Workforce Development Areas in Wisconsin: 2002 - 2012



Source: WIDWD, Office of Economic Advisors, Sept. 2004

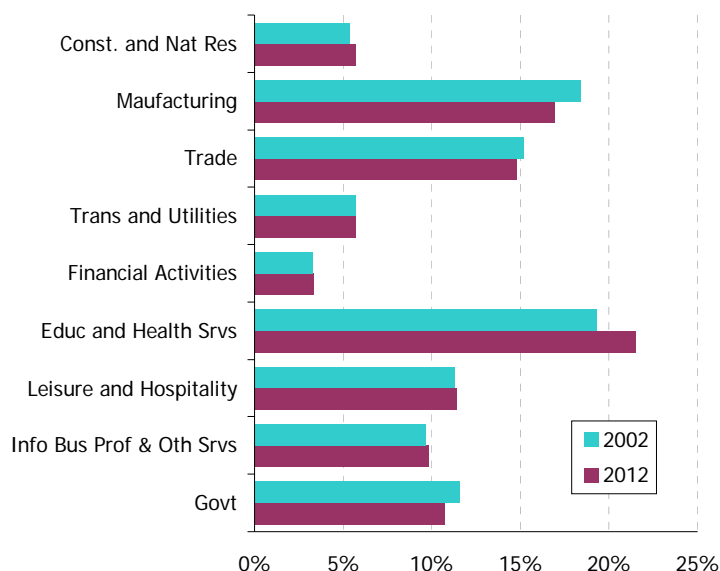
region, like most regions in the state, will experience a large increase in new and remodeled buildings and road construction and maintenance. A much smaller share of jobs in this group includes mining and natural resources. The many loggers in the area and some farm workers are included in the natural resources industry.

The third largest industry group, trade, is projected to add 930 jobs during the ten-year period. Roughly 15 percent of the region's jobs are with trade employers, the sixth highest share among the eleven WDAs in Wisconsin. Nearly one-quarter of the 10,620 jobs with trade employers are with food and beverage stores. The second largest industry in the trade group is general merchandise stores but like wood manufacturing, employment was suppressed.

The third greatest increase in jobs in the region is projected from employers in the information, professional and business services and other services industry group with the addition of 940 jobs from 2002 to 2012. One reason the group is large is that it is an aggregate of five industry sectors. In addition to the three included in the group name there are the industry sectors of management of companies; and administrative support, waste management and remediation services. Another reason for the multitude of jobs is that the sector provides support to other industries through temporary help agencies, corporate offices, publishing firms and research, data processing, and engineering firms.

The overall increase in jobs for the ten-year period in the Northwest region of 11.8 percent is the smallest increase in jobs projected among all the WDAs in the state (top chart).

Distribution of Jobs by Industry Sectors in Northwest Wisconsin: 2002 - 2012



Source: WI DWD, Office of Economic Advisors, September 2004

## Employment and wages

The annual average wage for all industries in the ten-county area increased 2.6 percent in 2003 to \$25,334. Wages earned by construction workers were the highest wages in the region and were 92 percent of wages earned by workers in the industry statewide. The greatest disparity in wages in the region compared with the state occurred in financial activities. In spite of this, the annual average wage in financial activities of \$27,163 exceeded the all industries average in the region.

Comparing wages from one region to another, or in this case, to the state often ignores some reasons for the disparity such as staffing and work patterns. For example, workers in the financial services industry in Northwest Wisconsin are in administrative support and clerical occupations that pay lower hourly wages than the professional occupations that are found in the industry statewide.

Another reason for lower annual average wages is the length of the workweek and the number of weeks worked in a year. These characteristics are especially prominent in the leisure and hospitality industry where the annual average wage in the region of \$10,533 is much closer to wages paid for similar

**2003 Average Annual Wage by Industry Division in Northwest WDA**

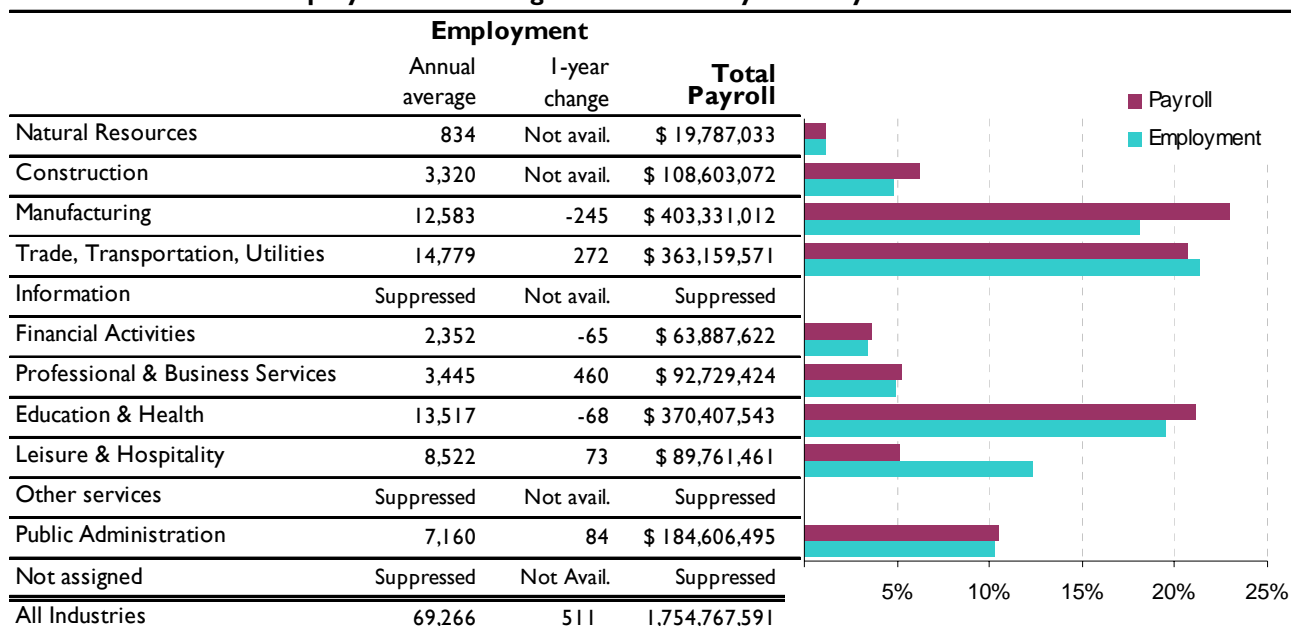
	Average Annual Wage		Percent of	I-year
	Wisconsin	Northwest	Wisconsin	% change
All Industries	\$ 33,423	\$25,334	76%	2.6%
Natural resources	\$ 25,723	\$23,725	92%	Not avail.
Construction	\$ 40,228	\$32,712	81%	Not avail.
Manufacturing	\$ 42,013	\$32,054	76%	4.7%
Trade, Transportation, Utilities	\$ 28,896	\$24,573	85%	1.8%
Information	\$ 39,175	Not avail.	Not avail.	Not avail.
Financial activities	\$ 42,946	\$27,163	63%	9.9%
Professional & Business Services	\$ 38,076	\$26,917	71%	-3.1%
Education & Health	\$ 35,045	\$27,403	78%	2.4%
Leisure & Hospitality	\$ 12,002	\$10,533	88%	2.6%
Other services	\$ 19,710	Not avail.	Not avail.	Not avail.
Public Administration	\$ 35,689	\$25,783	72%	2.7%

Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

work in the state.

The graph below illustrates the distribution of payroll and jobs with the major industry groups in Northwest Wisconsin. Roughly 23 percent of the region's total payroll, the highest share of any industry, is paid to manufacturing workers but employers in the industry supply only the third largest share of the jobs. The greatest share of jobs, 21.3 percent, is with employers in the trade, transportation and utilities group.

**2003 Employment and Wage Distribution by Industry in Northwest WDA**



Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

## Significant industries

### Top Five Industries in Northwest WDA

Industry	March-2004		Numeric Employment Change	
	Establishments	Employees	2003 - 2004	1999 - 2004
Educational Services	49	6,554	-43	-77
Food Services and Drinking Places	483	5,167	89	338
Executive, Legislative, & Gen. Government	229	5,121	-204	392
Wood Product Manufacturing	77	4,549	225	-157
Food and Beverage Stores	80	2,415	36	-237

Source: DWD, Bureau of Workforce Information, Quarterly Census of Employment and Wages

Five industry groups (listed above) in Northwest Wisconsin provide roughly one in every three jobs for local residents. These industries are at the 3-digit NAICS (North American Industry Classification System) level, the most specific detail available for counties and regions and are incorporated with the broader sectors on page 1. The second largest industry, food services and drinking places, is part of the leisure and hospitality sector. Wood products manufacturing employment in 2004 was not suppressed and appears on this list as do two industries detailed on page 1, education services and food and beverage stores. Employment for these industries is updated for March 2004.

These industries are significant because of the jobs they provide and the opportunities they will create for local job seekers. A brief description of the five industries follows. For each there is a list of the top 20 occupations with the most jobs based on state occupational patterns for that industry (local occupational patterns are not available).

Share of jobs in top five industries in Northwest WDA



### I. Education Services

Even though education services employment declined in Northwest Wisconsin in the last five years, historically the industry has added jobs and the projection to 2012 forecasts continued growth similar to state trends. The majority of jobs in education are with local and state institutions which, in turn, comprise over half of all state and local government jobs.

Growth in education services employment in Wisconsin is projected to slow to 15 percent in the 2002-2012 period from 21 percent in the previous ten-year period. Similar growth is projected for the Northwest region. Rising enrollments in post-secondary education, spurred by children of the baby boomers, and general demand for continued career and skills training, will be the catalyst for this industry's overall employment growth even though flat enrollments for elementary and secondary classes are projected in the U.S.

In addition to the hundreds of jobs that will be created as the industry expands there will be nearly as many generated by replacement needs as many current employees leave the occupation primarily for retirement.

In addition to the many teaching occupations included on the list of occupations ranked by total employment in 2012 in Wisconsin there are many non-teaching jobs. This list offers a glimpse of the occupation staffing patterns in institutions in Northwest Wisconsin.

### Top 20 Occupations in Wisconsin in Education Services Ranked by number of jobs projected in 2012

- Elementary School Teachers, Except Special Education
- Secondary School Teachers, Except Special and Vocational Education
- Teacher Assistants
- Middle School Teachers, Except Special and Vocational Education
- Janitors and Cleaners, Except Maids and Housekeeping Cleaners
- Vocational Education Teachers, Postsecondary
- Education Administrators, Elementary and Secondary School
- Special Ed. Teachers, Preschool, Kindergarten, and Elementary School
- Kindergarten Teachers, Except Special Education
- Educational, Vocational, and School Counselors
- Executive Secretaries and Administrative Assistants
- Cooks, Institution and Cafeteria
- Office Clerks, General
- Special Education Teachers, Secondary School
- Coaches and Scouts
- Vocational Education Teachers, Secondary School
- Special Education Teachers, Middle School
- Librarians
- Bookkeeping, Accounting, and Auditing Clerks
- Bus Drivers, School

Source: WI DWD, Office of Economic Advisors, Sept. 2004



## II. Food Services and Drinking Places

Roughly two in every three jobs in the leisure and hospitality industry sector are with food services and drinking places employers. Employment in leisure and hospitality is projected to increase 12.9 percent from 2002 to 2012. Although new job creation will not match the pace of the previous ten-year period the demand for workers generated by replacement needs is high due to low wages, seasonality and partial workweeks of many of the jobs. Census 2000 estimated that the average workweek in the industry was roughly 32 hours and most workers were employed for 43 weeks.

For many of the occupations listed in this table the need for replacements workers is at least three times the need resulting from new jobs. This is especially true in limited-service restaurants where first-time job seekers fill many vacancies and students work temporarily until they graduate and move on to other opportunities.

Although these occupations have a reputation for low wages several have the potential to produce higher earnings. In 2002 the average hourly wage for waiters was \$9.00 (includes some estimate of tips) but under good conditions that could double. The average hourly wage for chefs was over \$18.00 but one-quarter of the workers earned more than \$25.00/hour.

### Top 20 Occupations in Wisconsin in Food Services and Drinking Places Ranked by number of jobs projected in 2012

Waiters and Waitresses  
Combined Food Preparation and Serving Workers, Including Fast Food  
Bartenders  
Cooks, Restaurant  
Dishwashers  
First-Line Supervisors/Managers of Food Preparation and Serving Workers  
Cooks, Fast Food  
Cooks, Short Order  
Dining Room and Cafeteria Attendants and Bartender Helpers  
Food Preparation Workers  
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop  
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop  
Chefs and Head Cooks  
Food Service Managers  
Cashiers  
Janitors and Cleaners, Except Maids and Housekeeping Cleaners  
General and Operations Managers  
Driver/Sales Workers  
Truck Drivers, Light or Delivery Services  
Bookkeeping, Accounting, and Auditing Clerks

Source: WI DWD, Office of Economic Advisors, Sept. 2004

## III. Executive, Legislative & General Government

This industry group includes employment in public administration of government programs excluding jobs with state and local education, hospitals and the U.S. Postal Service. Jobs in federal health clinics and hospitals are included.

Public administration employment in 2003 was the fifth largest industry group in the WDA and provided roughly 5,120 jobs for local workers. The industry group is dominated by local government, which comprised 84 percent of all public administration jobs. That includes all city and county law enforcement, road maintenance, health and welfare departments, parks and recreation, utilities, and many more services. Also included in public administration are planning offices, correctional facilities, and transportation.

The list of occupations with the most jobs includes a large presence of occupations involved with public safety like patrol officers, fire fighters, highway workers, and EMTs. Three of the occupations, nurse aides, office clerks and RNs, appear on the list of occupations with the most annual openings and RNs are on the list of jobs on page 8 with the greatest percent increase.

Employment in the public sector is projected to increase the least from 2002 to 2012, adding only 280 jobs. Growth in public sector employment is constrained by decreasing budgets to administer government services.

### Top 20 Occupations in Wisconsin in Executive, Legislative & General Government Ranked by number of jobs projected in 2012

Police and Sheriff's Patrol Officers  
Fire Fighters  
Nursing Aides, Orderlies, and Attendants  
Legislators  
Highway Maintenance Workers  
Correctional Officers and Jailers  
Janitors and Cleaners, Except Maids and Housekeeping Cleaners  
Office Clerks, General  
Registered Nurses  
Secretaries, Except Legal, Medical, and Executive  
Emergency Medical Technicians and Paramedics  
Bookkeeping, Accounting, and Auditing Clerks  
Library Assistants, Clerical  
Court, Municipal, and License Clerks  
Recreation Workers  
Child, Family, and School Social Workers  
Landscaping and Groundskeeping Workers  
Maintenance and Repair Workers, General  
Water and Liquid Waste Treatment Plant and System Operators  
Detectives and Criminal Investigators

Source: WI DWD, Office of Economic Advisors, Sept. 2004

#### IV. Wood Product Manufacturing

Employers in wood products manufacturing in Northwest Wisconsin provide one in every three manufacturing jobs in the region and six percent of all jobs. Notably, one in five wood products manufacturing jobs in the state is in Northwest Wisconsin. Nearly half of the wood products manufacturing jobs in the region are in two counties: Rusk and Taylor.

This industry includes a few of the area's largest employers who produce windows and doors. Other significant wood products include veneers, dimensional lumber, and millwork.

In the last year wood products manufacturing employers added 225 jobs, more than they lost over the preceding five-year period. Many of those jobs are in production occupations like those listed on the right. In the next ten years the majority of the workers needed in these occupations will be to fill vacancies created as workers leave, even though wood products manufacturing is projected to increase ten percent during the projection period.

Most of the jobs on this list require only short- to moderate-term on-the-job training, that is training of less than 12 months. Additionally, many of them have starting wages between \$9-10.00/hour but median wages are closer to \$12-15.00/hour. The highest paying occupation on the list is the last one, industrial production managers with an average hourly wage of \$31.00.

#### Top 20 Occupations in Wisconsin in Wood Product Manufacturing Ranked by number of jobs projected in 2012

Woodworking Machine Setters, Operators, and Tenders, Except Sawing  
Team Assemblers  
Sawing Machine Setters, Operators, and Tenders, Wood  
Carpenters  
Machine Feeders and Offbearers  
Helpers--Production Workers  
First-Line Supervisors/Managers of Production and Operating Workers  
Cabinetmakers and Bench Carpenters  
Laborers and Freight, Stock, and Material Movers, Hand  
Sales Reps, Wholesale & Manufacturing, Except Technl-Scientific Products  
Fiberglass Laminators and Fabricators  
Industrial Truck and Tractor Operators  
Machinists  
Maintenance and Repair Workers, General  
Inspectors, Testers, Sorters, Samplers, and Weighers  
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders  
Truck Drivers, Heavy and Tractor-Trailer  
Office Clerks, General  
Cutting/Punching, & Press Mach. Setters, Operators, & Tenders, Mtl-Plastic  
Industrial Production Managers

Source: WI DWD, Office of Economic Advisors, Sept. 2004

#### V. Food and Beverage Stores

In 2004 there were 80 food and beverage stores in the northwest region with roughly 2,400 jobs. Most of those jobs were in grocery stores but convenience stores, meat markets, bakeries, and liquor stores are also included in the industry group. Employment in food and beverage stores is projected to increase 7.1 percent from 2,250 in 2002 to 2,410 in 2012.

The largest employers in this group are grocery stores and the largest grocery stores are located in the area's largest cities. While most of the work is year-round those stores located in tourism areas are significantly busier during the summer months. The occupations of workers in grocery stores are more diverse than in most other retail stores and range from food preparation workers, butchers, bakers, and packers to the more traditional occupations found in other retail stores, like cashiers and managers.

Most of the occupations require only a short training period and are part-time. Hourly wages reflect these conditions. In Northwest Wisconsin the average hourly wage of cashiers was \$8.20 but half of the workers earn less than \$7.40/hour. The occupation with the highest hourly wages is general managers but the second highest hourly wages of \$17.50 are earned by sales representatives.

#### Top 20 Occupations in Wisconsin in Food and Beverage Stores Ranked by number of jobs projected in 2012

Cashiers  
Stock Clerks and Order Fillers  
Packers and Packagers, Hand  
First-Line Supervisors/Managers of Retail Sales Workers  
Retail Salespersons  
Combined Food Preparation and Serving Workers, Including Fast Food  
Food Preparation Workers  
Butchers and Meat Cutters  
Laborers and Freight, Stock, and Material Movers, Hand  
Bakers  
General and Operations Managers  
Bookkeeping, Accounting, and Auditing Clerks  
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop  
Truck Drivers, Heavy and Tractor-Trailer  
Sales Reps, Wholesale & Manufacturing, Except Technl-Scientific Products  
Driver/Sales Workers  
Office Clerks, General  
Janitors and Cleaners, Except Maids and Housekeeping Cleaners  
Counter and Rental Clerks  
First-Line Supervisors/Managers of Food Prep. & Serving Workers

Source: WI DWD, Office of Economic Advisors, Sept. 2004

## Occupation projections

### Occupational Group Summary for Northwest Workforce Development Area

Occupational Groups	Estimated Employment		2002 - 2012 Change		Annual average			Average hourly wage	Annual average wage
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings		
Total, All Occupations	69,710	77,960	8,250	11.8%	830	1,740	2,570	\$13.65	\$28,389
Management, Business & Financial Operations	4,340	4,980	640	14.7%	70	80	150	\$26.56	\$55,235
Computer, Math, Architecture & Engineering	1,400	1,580	180	12.9%	20	30	50	\$22.43	\$46,644
Life & Social Sciences, Legal, Art & Entertaining	2,820	3,270	450	16.0%	60	40	100	\$18.22	\$37,907
Education, Training, & Library	4,230	5,030	800	18.9%	80	90	170	\$17.21	\$35,806
Healthcare Practitioners, Technicians & Support	5,090	6,500	1,410	27.7%	150	80	230	\$15.35	\$31,933
Food Preparation & Serving	7,130	7,950	820	11.5%	80	280	360	\$8.00	\$16,638
Protective, Maintenance & Personal Care Service	6,190	7,210	1,020	16.5%	100	140	240	\$11.06	\$23,001
Sales and Related	6,530	7,250	720	11.0%	70	230	300	\$10.65	\$22,158
Office/Administrative Support	10,300	10,590	290	2.8%	30	250	280	\$11.83	\$24,605
Natural Resources, Mining & Construction	3,790	4,480	690	18.2%	70	80	150	\$16.62	\$34,578
Installation, Maintenance, Repair & Production	11,290	11,880	590	5.2%	60	270	330	\$13.87	\$28,860
Transportation/Material Moving	6,610	7,250	640	9.7%	60	140	200	\$13.37	\$27,818

Source: Wisconsin Department of Workforce Development, Office of Economic Advisors, September 2004

The occupation projections for Northwest Wisconsin over a ten-year period that ends in 2012 include 8,250 new jobs created by expansion from existing employers or by new employers moving to the area. The projections also include a ten-year projection of 25,700 job openings generated when

workers leave an occupation and create a need for a replacement worker. An example of this would be a nurse aide who retires from the occupation, or after completing training, becomes a registered nurse. Replacement needs do **not** include openings that occur when a nurse aid leaves one employer to work for another in the same occupation.

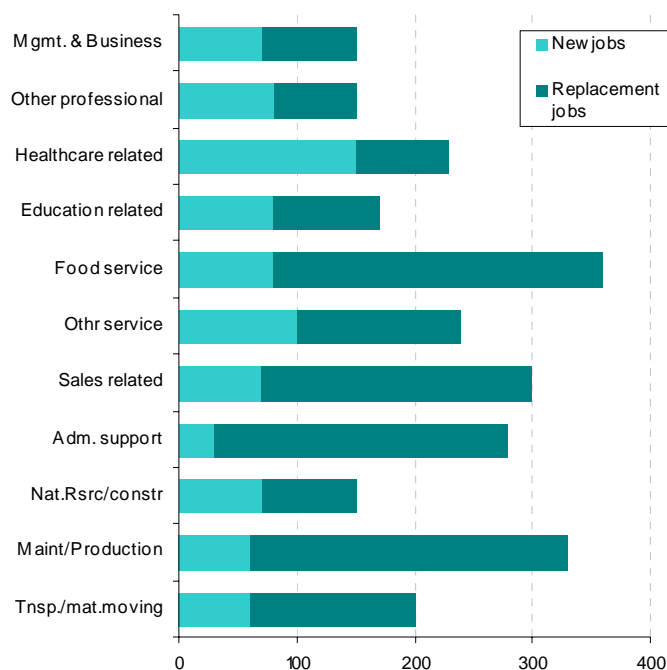
These projections do not include an estimate of self-employed (included in previous projections), therefore the total number of jobs in occupations, projected to increase to 77,960 by 2012 matches the industry changes on page 1.

The greatest increase, 18 percent of all new jobs, occurs in healthcare occupations with the addition of 1,410 jobs. The share of jobs in healthcare occupations increases from 7.3 percent to 8.3 percent of all jobs in the WDA. The greatest share of jobs in the region will be in installation, maintenance, repair and production occupations, in spite of a decline from 16.2 percent in 2002 to 15.2 percent in 2012. The second greatest share of jobs, in office and administrative support occupations, follows a similar pattern declining from 14.8 to 13.6 percent of all jobs. In both occupational groups the number of replacement openings greatly exceeds the number of openings from new jobs.

Together new and replacement jobs produce the total (annual) jobs openings projected for an occupation over the projection period. In nearly all occupation groups, except community and social sciences and health related occupations, the number of replacement jobs exceeds the number of jobs created from growth.

Both sources of job openings are important. Too often the focus is only on job growth and little attention is given to the

#### Annual Openings by Occupation Groups in Northwest WDA



Source: WIDWD, Office of Economic Advisors, September 2004



### Twelve Occupations with the Most Annual Openings from 2002-2012 in Northwest Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New	Replace-	Total			
					Jobs	ments	Openings			
Cashiers	2,220	2,410	190	8.6%	20	110	130	1 mo. or less trng. on-the-job	\$7.47	\$6.23 - \$8.36
Waiters/Waitresses	1,560	1,770	210	13.5%	20	80	100	1 mo. or less trng. on-the-job	\$7.34	\$6.05 - \$7.23
Retail Salespersons	1,820	2,040	220	12.1%	20	70	90	1 mo. or less trng. on-the-job	\$8.90	\$6.88 - \$9.17
Truck Drivers/Hvy/Tractor-Trailer	1,710	2,070	360	21.1%	40	30	70	1-12 mos. training on-the-job	\$17.10	\$12.84 - \$20.82
Comb Food Prep/Server/Incl Fast	1,130	1,340	210	18.6%	20	50	70	1 mo. or less trng. on-the-job	\$6.60	\$5.87 - \$6.99
Nursing Aides/Orderlies/Attndnts	1,450	1,750	300	20.7%	30	20	50	1 mo. or less trng. on-the-job	\$10.17	\$8.94 - \$11.33
Registered Nurses	1,060	1,370	310	29.2%	30	20	50	Bachelor's or Assoc. degree**	\$21.38	\$18.34 - \$23.93
Bartenders	1,020	1,100	80	7.8%	10	40	50	1 mo. or less trng. on-the-job	\$7.82	\$7.09 - \$8.41
Carpenters	920	1,130	210	22.8%	20	20	40	1 yr. or more trng. on-the-job	\$16.53	\$12.71 - \$20.70
Office Clerks/General	1,110	1,160	50	4.5%	10	30	40	1 mo. or less trng. on-the-job	\$9.69	\$7.81 - \$11.43
Labrs/Frght/Stock/Matrl Movrs/Hand	1,130	1,090	-40	-3.5%	0	40	40	1 mo. or less trng. on-the-job	\$11.65	\$8.13 - \$14.31
Personal and Home Care Aides	400	580	180	45.0%	20	10	30	1 mo. or less trng. on-the-job	\$8.45	\$7.67 - \$9.21

Source: WI DWD, Office of Economic Advisors, September 2004

\* may include classroom instruction \*\* depends on employer

vacancies generated from replacement needs. But as baby-boomers approach retirement age the need to fill replacement jobs looms menacingly on the horizon. The average age of all workers in 2000 was 41 years but was higher in occupations that require a degree. The average age of workers with an associate degree and higher in healthcare occupations in the Northwest WDA was 44 years old in 2000.

The chart on page 7 clearly identifies healthcare occupations as the group that will have the most new jobs. There are 60 health related occupations in the WDA but the need for registered nurses will generate one-fifth of the new jobs in healthcare and will produce the second highest number of new job of any occupation in the region. The list of occupations

generating the most new jobs, as well as other ranked tables and a list of all occupations in Northwest Wisconsin is available at <http://dwd.wisconsin.gov/oea/wda/projections/nw.htm>.

The twelve occupations with the most openings in the top table represent nearly 30 percent of total openings projected for the Northwest WDA. One occupation, laborers and freight, stock and material movers-hand, made it to this list in spite of a loss of jobs during the ten-year period.

Eight of the twelve jobs typically require very little training and many of them are often filled by workers who are entering the labor force, attending school, working another job, or seeking retirement income. One irrefutable fact is that there will be an abundance of job openings during the projection period that

### Twelve Occupations with the Greatest Percent Change from 2002-2012 in Northwest Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New	Replace-	Total			
					Jobs	ments	Openings			
Home Health Aides	280	420	140	50.0%	10	0	10	1 mo. or less trng. on-the-job	\$9.17	\$8.06 - \$10.13
Personal and Home Care Aides	400	580	180	45.0%	20	10	30	1 mo. or less trng. on-the-job	\$8.45	\$7.67 - \$9.21
Social/Human Service Assts	250	340	90	36.0%	10	0	10	1-12 mos. training on-the-job	\$13.06	\$9.36 - \$16.44
Registered Nurses	1,060	1,370	310	29.2%	30	20	50	Bachelor's or Assoc. degree**	\$21.38	\$18.34 - \$23.93
Preschool Teachers/Ex Spcl Ed	250	320	70	28.0%	10	0	10	Bachelor's degree	\$15.37	\$12.99 - \$18.17
Electricians	290	370	80	27.6%	10	10	20	1 yr. or more trng. on-the-job*	\$17.18	\$12.21 - \$21.57
Receptionists/Info Clerks	490	620	130	26.5%	10	10	20	1 mo. or less trng. on-the-job	\$9.81	\$8.67 - \$10.78
Bus Drivers/School	310	390	80	25.8%	10	10	20	1 mo. or less trng. on-the-job	\$11.15	\$9.34 - \$13.28
Child Care Wrkrs	240	300	60	25.0%	10	10	20	1 mo. or less trng. on-the-job	\$8.96	\$7.14 - \$9.66
Counter and Rental Clerks	160	200	40	25.0%	0	10	10	1 mo. or less trng. on-the-job	\$8.81	\$6.69 - \$8.73
Plumbers/Pipefitters/Steamfitters	200	250	50	25.0%	10	10	20	1 yr. or more trng. on-the-job*	\$23.41	\$22.83 - \$26.94
Hairdress/Hairstyl/Cosmetologists	210	260	50	23.8%	10	0	10	Postsecondary vocational trng.	\$8.45	\$6.27 - \$10.22

Source: WI DWD, Office of Economic Advisors, September 2004

\* may include classroom instruction \*\* depends on employer

require no formal training. The table below groups occupations by typical education or training path and shows that 44 percent of projected openings will be in occupations that require only short-term training (less than one month). This is much higher than in Wisconsin (40%) and the United States (41%). Too often these jobs are ignored but they do offer some potential. Supervisors and middle-managers acquire experience from these jobs and are often promoted to those positions from within the company.

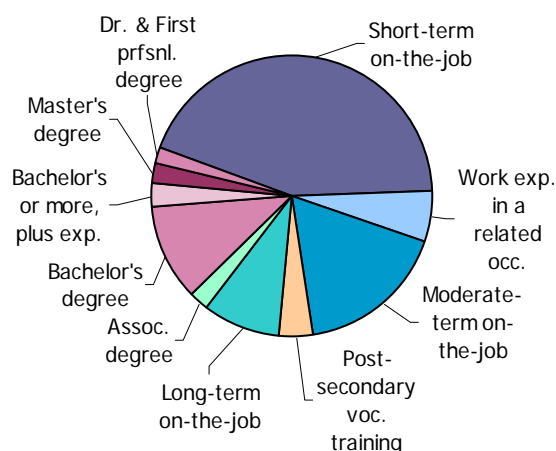
The second table on page 8 also includes occupations with minimal training requirements but more of these occupations require some training or degree. Many times the occupations on this list, a.k.a. the 'Hot Jobs' list, have fewer jobs and fewer new job openings and that is generally true about the list for the northwest. The sum of the total openings in the twelve occupations with the greatest percent change represents only nine percent of total openings projected for the Northwest WDA.

The four occupations at the top of this list can be associated with home care especially the top two occupations, home health aides and personal and home care aides. Home health aides help elderly, convalescent, or disabled persons live in their own homes instead of in a health facility and work under the direction of nursing or medical staff to provide health-related services, such as administering oral medications. The number of jobs in the occupation is projected to increase 50 percent by 2012 with the addition of 140 new jobs. Personal and home care aides provide housekeeping and routine personal care services. They clean clients' houses, do laundry, and change bed linens. Aides may plan meals (including special diets), shop for food, and cook. Aides also may help clients bathe, dress, and groom. This occupation is projected to increase 45 percent during the projection period with the addition of 180 new jobs.

Both of these occupations are primarily employed by home healthcare agencies and are assigned duties and supervised by a registered nurse (4th on list), physical therapist, or social worker (3rd on list). And, both occupations typically require minimal training but in recent years more of that training has been provided by education institutions. This change in how workers learn a job is representative of changes in training that is occurring in many other occupations.

In the last two decades employers have switched from in-house training to training provided by education institutions and jobs that were previously filled by someone with moderate- to long-term on-the-job training are now filled by workers with vocational training. That said, the basic requirements for jobs with advanced degrees have not changed and only 16 percent of the total job openings projected during the ten-year period will require a bachelor's degree or higher.

**Distribution of Total Openings in Northwest WDA by Training Path**



**Typical Education or Training Path\* for Jobs in Northwest Workforce Development Area**

Education or Training	Number of Occupations	Estimated Employment		2002-2012 Change		Annual average			Distribution of Total Openings
		2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings	
<b>Total</b>	728	69,720	77,960	8,240	11.8%	850	1,750	2,600	100.0%
Associate degree	33	1,590	1,910	320	20.1%	30	30	60	2.3%
Bachelor's degree	104	7,570	8,920	1,350	17.8%	140	150	290	11.2%
Master's degree	34	1,410	1,660	250	17.7%	30	30	60	2.3%
First professional degree	16	490	610	120	24.5%	10	10	20	0.8%
Doctoral degree	39	520	680	160	30.8%	20	10	30	1.2%
Long-term on-the-job training	80	6,070	6,930	860	14.2%	90	140	230	8.8%
Moderate-term on-the-job training	165	15,390	16,560	1,170	7.6%	120	330	450	17.3%
Short-term on-the-job training	134	27,380	30,270	2,890	10.6%	290	850	1,140	43.8%
Bachelor's degree or more, plus work exp.	29	2,210	2,490	280	12.7%	30	40	70	2.7%
Work exp. in a related occupation	45	4,450	4,910	460	10.3%	50	100	150	5.8%
Postsecondary vocational training	49	2,640	3,020	380	14.4%	40	60	100	3.8%

\* This provides a general indication of the education or training typically needed in occupations. There may be other pathways.

Source: WI DWD, Office of Economic Advisors, September 2004

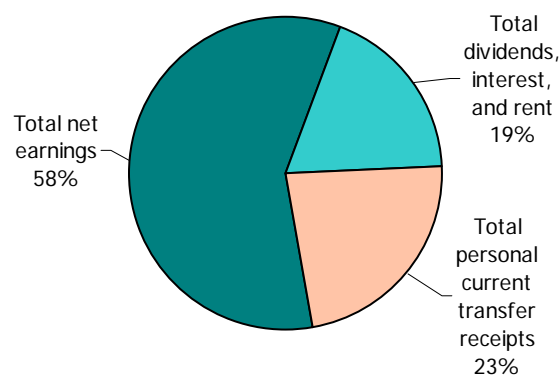
## Total personal income

Total personal income is the sum of net earnings, income from dividends, interest and rent, and receipts from transfer payments. The data on personal income collected by the U.S. Bureau of Economic Analysis is the most complete set of personal income published.

Just 58 percent of total personal income (TPI) in Northwest Wisconsin is from net earnings, the smallest share among the workforce development areas in Wisconsin. Net earnings include wage and salary disbursements including employer contributions for pension, insurance and government social insurance; proprietor's income; and adjustment for residents who work in jobs outside the area. Net earnings increased 27.2 percent in the last five years, slower than the increase in Wisconsin and in the United States (see table below). The increases in the beginning of the five-year period were much greater than the increases in the later years when recession slowed income growth not only in the WDA but also in the state and nation.

Net earnings reflect the wages earned in an area which, in turn, reflect the industry and occupation patterns of the workers in the area, both previously discussed. The importance of occupational patterns in a region cannot be over-stated. Areas with higher concentrations of professional and technical workers have higher earnings. The highest per capita net earnings among the WDAs is \$29,067 in the WOW WDA where more than 30 percent of the workers are in professional and technical

**Major Components of Total Personal Income  
in 2002 in  
Northwest Workforce Development Area**



Source: Special tabulation by WI OEA & US BEA files

occupations. In the northwest region roughly 22 percent of the jobs are in these occupations and, even then, the mix of professional jobs in the northwest includes a smaller share of jobs that command higher wages.

The second greatest source of income in the Northwest WDA, 23 percent, is from transfer receipts. Transfer receipts include benefits from government social insurance funds,

### Total Personal Income in Northwest Workforce Development Area

% Change from 1997 to 2002

	1997	2002	Northwest	Wisconsin	United States
<b>Population</b>	178,780	181,897	1.7%	3.3%	5.6%
<b>Total Personal Income</b> (in thousands)	\$3,336,261	\$4,227,898	26.7%	26.6%	28.8%
<b>Net Earnings</b>	\$1,945,211	\$2,475,244	27.2%	27.6%	30.4%
<b>Dividends, Interest, and Rental Income</b>	\$682,210	\$787,276	15.4%	14.9%	18.4%
<b>Transfer Receipts</b>	\$708,840	\$965,378	36.2%	39.4%	35.8%
Income Maintenance	\$55,261	\$59,401	7.5%	29.1%	21.3%
Unemployment insurance benefit payments	\$20,381	\$36,603	79.6%	147.2%	166.1%
Social security and other benefits	\$633,198	\$869,374	37.3%	36.9%	34.4%
<b>Per Capita Personal Income</b>	\$18,661	\$23,243	24.6%	22.6%	22.0%
Per Capita Net Earnings	\$10,880	\$13,608	25.1%	23.5%	23.4%
Per Capita Dividends, Interest, and Rental Income	\$3,816	\$4,328	13.4%	11.3%	12.1%
Per Capita Transfer Receipts	\$3,965	\$5,307	33.9%	35.0%	28.6%
<b>Total Employment</b> (see glossary)	93,334	100,125	7.3%	5.0%	7.3%
Wage and salary jobs	72,009	75,739	5.2%	4.3%	5.9%
Number of non-farm proprietors	17,125	20,271	18.4%	11.2%	16.0%
<b>Average earnings per job</b>	\$22,261	\$26,026	16.9%	21.0%	21.2%
Average wage & salary disbursements	\$20,813	\$24,784	19.1%	19.0%	21.1%
Average nonfarm proprietors income	\$14,253	\$14,289	0.3%	37.0%	24.7%

Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis, May 2004

primarily social security and Medicare, and other programs. Unlike net income, transfer receipts increased more rapidly in the later years of the five-year period as the recession deepened. Payments of unemployment insurance benefits rose 80 percent in the WDA from 1997 to 2002, an increase that was actually smaller than in the state or nation. From 2001 to 2002 the number of residents who filed at least one claim for unemployment benefits increased by 3,600 to 15,600. That began to decline in 2003 and by 2004 had fallen to 11,800.

The final piece of the pie is income from dividends, interest, and rent. Like net earnings, increases earlier in the five-year period

exceeded those in later years. Over the entire timeframe income from dividends, interest and rent increased 15.4 percent in the region, exceeding increases in Wisconsin but lagging increases in the nation. No doubt, the increase in population from people moving to the area contributed to the rise in income from dividends, interest, and rent.

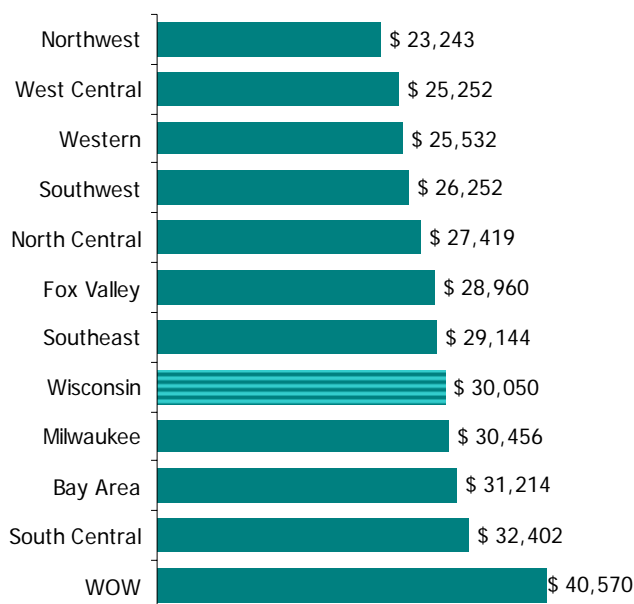
In the last five years total personal income increased 26.7 percent in Northwest Wisconsin, roughly matching the increase in Wisconsin but lagging the change in the United States. In spite of this growth in TPI, per capita personal income increased only 24.6 percent, but that was better than in Wisconsin and the United States. The explanation for an increase in TPI that exceeded the increase in PCPI is in population demographics.

Per capita personal income (PCPI) is the quotient of total personal income divided by total population. If a greater share of residents are younger or older they contribute less (or not at all) to total income. A region that has a higher share of younger or older population will have a lower PCPI. Conversely, a population with a greater share of residents middle-aged (and in their prime working years) will generally have a higher PCPI especially since earnings from employment are the greatest source of total personal income.

In 2000, Northwest Wisconsin had the smallest share (19.4%) of residents under 15 years old among the WDAs but had the highest share of population over the age of 65 years (17.1%), an age when income is reduced and income growth slows. These two reasons contributed to the low PCPI in Northwest Wisconsin of \$23,243, the lowest among the WDAs in Wisconsin, but the low annual wages are still the major reason that PCPI is so low.

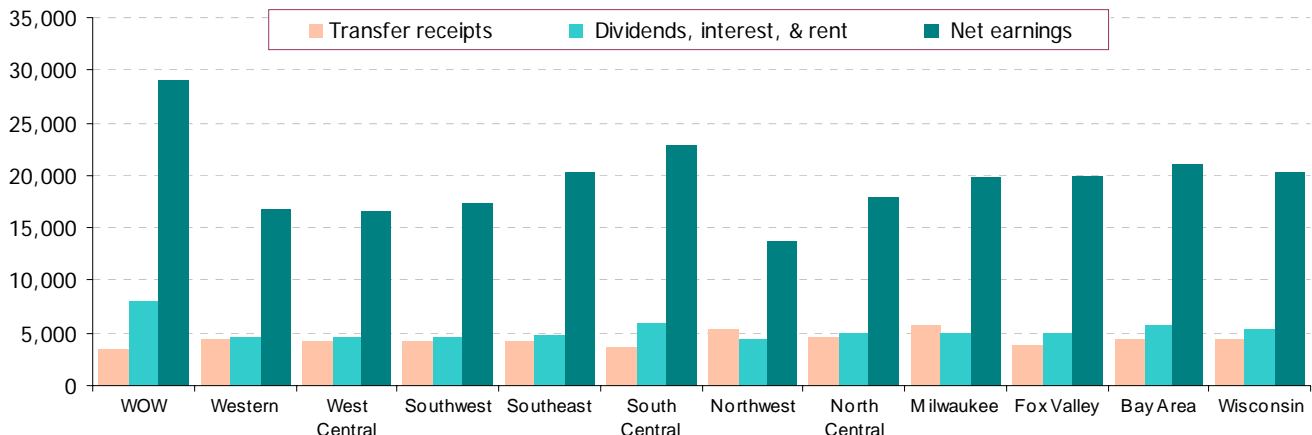
The bottom chart displays the per capita income by major component for each workforce development area in Wisconsin. In all areas income from net earnings greatly exceeds income from either transfer receipts or from dividends, interest and rent.

Per Capita Personal Income by WDA



Source: US Dept. of Commerce, Bureau of Economic Analysis

Per Capita Income by Major Components of Total Personal Income: 2002

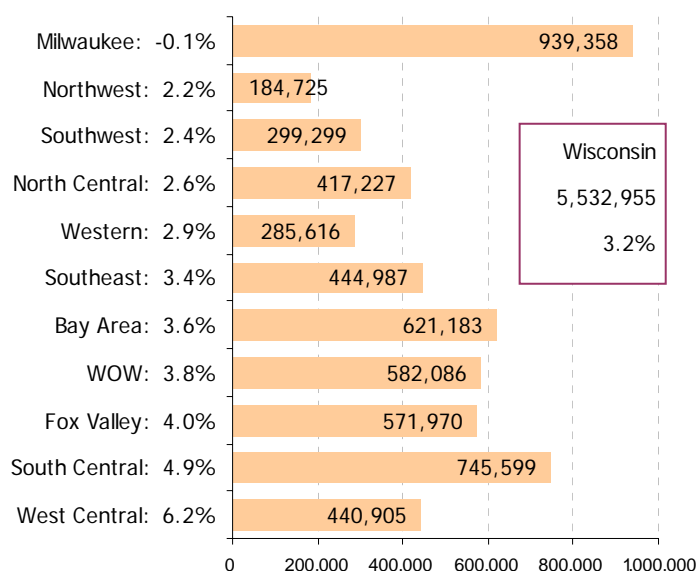


Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis

## Connecting the Elements

All of the elements in this profile industry, earnings, occupational patterns, income and population are connected. Industry provides jobs, jobs generate earnings and earnings attract workers and, through consumption, generate more jobs. Jobs require workers with occupational skills and those workers are part of the local labor force which is a share of the total population.

### 2004 WDA Population and Percent Change from 2000



Source: WI Dept. of Administration, Demographic Services Center

The population in Northwest Wisconsin is increasing but at a slower pace than nearly all other WDAs in Wisconsin. From 2000 to 2004 roughly 3,950 residents were added to the local population for a percent change of 2.2 percent. Over half of the increase in WDA population occurred in three counties: Sawyer, Burnett and Washburn. These three counties are also destinations for residents relocating to the area, especially residents from Minnesota, and the average age of these relocated residents was 35 years old in 2000. Sawyer County ranked 11<sup>th</sup> fastest growing county in the state in 2004 and Burnett and Washburn ranked 18<sup>th</sup> and 19<sup>th</sup>, respectively.

In general, the population increases either because there are more births than deaths in the area or because new residents move into the area. In Northwest Wisconsin the number of deaths exceeded the number of births by 504 residents resulting in no increase from natural causes. The population increased because 4,447 individuals moved into the area.

The population is projected to continue to expand primarily from migration as the number of deaths is forecast to outnumber births, a situation that will only be magnified

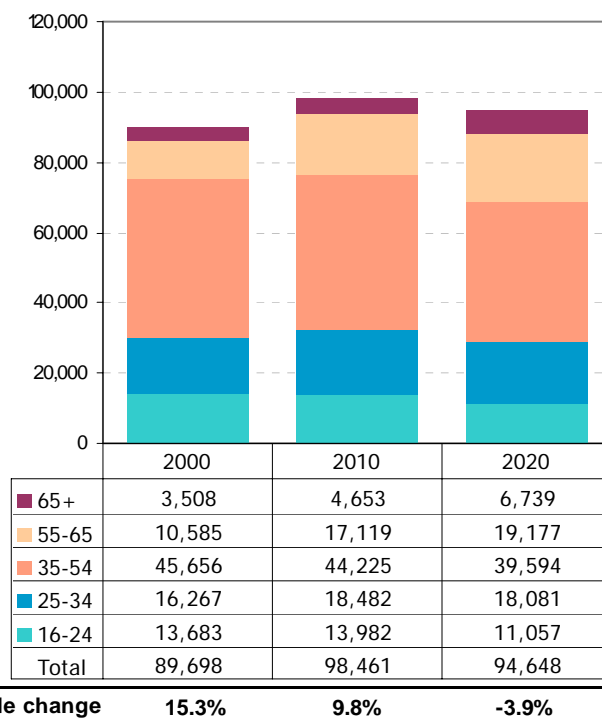
as the years approach 2020. During those years people will continue to move into the area but the increases from migration will slow. The population in Northwest Wisconsin is projected to increase 7.0 percent with the addition of 12,630 individuals from 180,780 in 2000 to 193,410 in 2020. The projection forecasts larger increases from 2000-2010 than from 2010-2020.

Currently the individuals who move are generally older but not so old that they are retirement age. The largest adult age group in the Northwest WDA population in 2000 was aged 40-49 years and roughly 85 percent of the residents in this group participate in the labor force. Those aged 40-49 years are grouped in the bottom graph with residents aged 35-54 years who comprise the largest segment of the labor force.

By 2020, however, those 40 years old in 2000 will be 60 years old and this is the crux of the problem forecast to occur over the next two decades. The share of population aged 60 years and older will increase from 22.1 percent in 2000 to 31.6 percent in 2020, from 40,033 to 68,416 residents. As the population ages labor force participation declines from 86 percent for those aged 35 to 39 years to 43 percent for those aged 60-64 years and 22 percent for those aged 65-69 years.

Using current labor force participation rates (LFPR) for age groups, and incorporating the projected changes in LFPR

### Northwest WDA Labor Force Projections by Age



**Decade change**      **15.3%**      **9.8%**      **-3.9%**

Source: DWD, Office of Economic Advisors, August 2004



forecast nationally by the U.S. Bureau of Labor Statistics, provides a rough estimate of the future age composition of the labor force that appears in the graph at the bottom of the previous page. This forecasts a projected total labor force of 97,700 in 2012 and is represented by the diamond in the graph on this page. It should be noted that the most significant changes in population and labor force, caused by an aging baby-boom population, occur in the second half of the decade ending 2020 and do not appear in this graph. The year 2012 demarcates the end of the period for industry and occupation projections.

The changes through 2020 are incorporated into the labor force projections by age graph on the previous page. That graph depicts a labor force that will reach a high-water mark in 2010. From 1990-2000 the labor force expanded 15.2 percent in Northwest Wisconsin and that expansion will continue through 2010 with an increase of 9.8 percent. The increases of the last and current decade were driven by the multitude of population in the primary working age groups. As this population ages labor force participation declines and, driven by the sheer number of these residents retiring from the labor force, the number of labor force participants will diminish. Most of the decline in labor force occurs in the years after 2015.

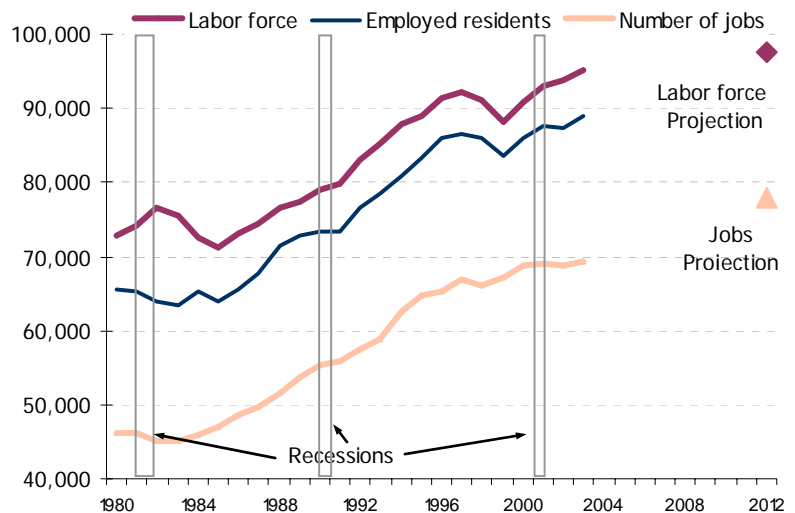
The graph on the right includes not only the labor force projection but also the industry projection from page 1 and an historic representation of the number of total employed in the region. The top line, representing the total number of residents who participate in the labor force by either working or looking for work increased from 72,900 in 1980 to 95,200 in 2003. During those 23 years there were three national recessions, 1981-82, 1990-91, and 2001 that affected the local area. Since unemployment generally lags a recession the area on the graph depicting those years appear a bit later. The gap between the top, labor force line and the second, employment line represents the number of unemployed in the area labor force.

From 1990 to 2000 the labor force expanded 15 percent, employment grew by 17 percent and the number jobs with area employers increased 35 percent. In the late 1990s, as the number of jobs increased and the supply of area workers tightened, the Northwest WDA unemployment rate dropped to a record low of 5.1 percent.

During the projection period the number of jobs is expected to increase 11.8 percent and labor force growth is projected to expand 9.8 percent. The slower labor force growth and

shifting age composition will bring about a multitude of workforce issues. One issue is that there will be a shortage of younger workers to not only physically replace the retiring baby-boomers but to replace the knowledge and skill acquired by years on the job. Employment trends in recent years that rely on temporary workers and have been fraught with frequent lay offs, are not conducive to investing in the time to thoroughly train younger workers.

### Historic & Projected Labor Force & Jobs in Northwest WDA



Source: WI DWD, Bureau of Workforce Information & Office of Economic Advisors

Another issue has been the general focus on occupations that are rapidly growing, like those related to computer systems, or those adding the most new jobs, and inadequate attention on the occupations that will have numerous vacancies created when workers leave the occupation, like carpenters. There has also been a lack of attention given to occupations that require a physical presence in order to complete the job. These occupations are more likely to be locally based and not prone to out-sourcing.

And, there is the issue evolving from shifts in consumer behavior as the population ages. There is no better example of this than the healthcare industry and the correlation between an increase in age and the increased demand for healthcare services.

Awareness of the workforce issues is the first step in moving toward solutions and employers and planners in Northwest Wisconsin are doing both.

The workforce development profiles are produced by the Office of Economic Advisors in the Wisconsin Department of Workforce Development. The author of this profile and regional contact for additional labor market information is:

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